

March 21, 2022

U.S. Environmental Protection
Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Dear EPA,

The Fort McDermitt Paiute and Shoshone Tribe respectfully submits the enclosed Fiscal Year 2023 Environmental Protection Agency Air Proposal. The Fort McDermitt Paiute-Shoshone Tribe commits to enhance the Environmental Department by pursuing an Air grant.

The Fort McDermitt Paiute-Shoshone Tribe wishes to extend a warm thank you for the support provided by the Environmental Protection Agency in properly addressing the issues related to the protection of the Fort McDermitt Paiute-Shoshone Tribe environment, ecosystem, and the members of the community.

Any questions may be directed to me at (775) 532-8259 or Duane Masters Sr., Environmental Director.

Sincerely,

Maxine Redstar, Tribal Chairwoman
FORT MCDERMITT PAIUTE SHOSHONE TRIBE

cc: Duane Masters Sr., Environmental Director
File

Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance

Note: Read Instructions before completing form.

I. A. Applicant/Recipient (Name, Address, City, State, Zip Code)

Name: Fort McDermitt Paiute and Shoshone Tribe

Address: PO Box 457

City: McDermitt

State: NV: Nevada

Zip Code: 89421-0457

B. DUNS No. 064791478

II. Is the applicant currently receiving EPA Assistance? ☒ Yes ☐ No

III. List all civil rights lawsuits and administrative complaints pending against the applicant/recipient that allege discrimination based on race, color, national origin, sex, age, or disability. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

None

IV. List all civil rights lawsuits and administrative complaints decided against the applicant/recipient within the last year that allege discrimination based on race, color, national origin, sex, age, or disability and enclose a copy of all decisions. Please describe all corrective actions taken. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

None

V. List all civil rights compliance reviews of the applicant/recipient conducted by any agency within the last two years and enclose a copy of the review and any decisions, orders, or agreements based on the review. Please describe any corrective action taken. (40 C.F.R. § 7.80(c)(3))

None

VI. Is the applicant requesting EPA assistance for new construction? If no, proceed to VII; if yes, answer (a) and/or (b) below.

☐ Yes ☒ No

a. If the grant is for new construction, will all new facilities or alterations to existing facilities be designed and constructed to be readily accessible to and usable by persons with disabilities? If yes, proceed to VII; if no, proceed to VI(b).

☐ Yes ☐ No

b. If the grant is for new construction and the new facilities or alterations to existing facilities will not be readily accessible to and usable by persons with disabilities, explain how a regulatory exception (40 C.F.R. 7.70) applies.

VII. Does the applicant/recipient provide initial and continuing notice that it does not discriminate on the basis of race, color, national origin, sex, age, or disability in its program or activities? (40 C.F.R. 5.140 and 7.95)

☒ Yes ☐ No

a. Do the methods of notice accommodate those with impaired vision or hearing?

☒ Yes ☐ No

b. Is the notice posted in a prominent place in the applicant's offices or facilities or, for education programs and activities, in appropriate periodicals and other written communications?

☒ Yes ☐ No

c. Does the notice identify a designated civil rights coordinator?

☐ Yes ☒ No

VIII. Does the applicant/recipient maintain demographic data on the race, color, national origin, sex, age, or handicap of the population it serves? (40 C.F.R. 7.85(a))

☐ Yes ☒ No

IX. Does the applicant/recipient have a policy/procedure for providing access to services for persons with limited English proficiency? (40 C.F.R. Part 7, E.O. 13166)

☒ Yes ☐ No

- X. If the applicant is an education program or activity, or has 15 or more employees, has it designated an employee to coordinate its compliance with 40 C.F.R. Parts 5 and 7? Provide the name, title, position, mailing address, e-mail address, fax number, and telephone number of the designated coordinator.**

None

- XI. If the applicant is an education program or activity, or has 15 or more employees, has it adopted grievance procedures that assure the prompt and fair resolution of complaints that allege a violation of 40 C.F.R. Parts 5 and 7? Provide a legal citation or Internet Address for, or a copy of, the procedures.**

Tribal Operations Manual
Fort McDermitt Paiute and Shoshone Tribe of Nevada and Oregon
Page 019-020 Section Grievance Procedures

For the Applicant/Recipient

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. I assure that I will fully comply with all applicable civil rights statutes and EPA regulations.

A. Signature of Authorized Official

Duane A Masters Sr

B. Title of Authorized Official

Tribal Chairwomen

C. Date

03/25/2022

For the U.S. Environmental Protection Agency

I have reviewed the information provided by the applicant/recipient and hereby certify that the applicant/recipient has submitted all preaward compliance information required by 40 C.F.R. Parts 5 and 7; that based on the information submitted, this application satisfies the preaward provisions of 40 C.F.R. Parts 5 and 7; and that the applicant has given assurance that it will fully comply with all applicable civil rights statutes and EPA regulations.

A. *Signature of Authorized EPA Official

B. Title of Authorized Official

C. Date

*** See Instructions**

Instructions for EPA FORM 4700-4 (Rev. 06/2014)

General. Recipients of Federal financial assistance from the U.S. Environmental Protection Agency must comply with the following statutes and regulations.

Title VI of the Civil Rights Acts of 1964 provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. The Act goes on to explain that the statute shall not be construed to authorize action with respect to any employment practice of any employer, employment agency, or labor organization (except where the primary objective of the Federal financial assistance is to provide employment). Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act provides that no person in the United States shall on the ground of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under the Federal Water Pollution Control Act, as amended. Employment discrimination on the basis of sex is prohibited in all such programs or activities. Section 504 of the Rehabilitation Act of 1973 provides that no otherwise qualified individual with a disability in the United States shall solely by reason of disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Employment discrimination on the basis of disability is prohibited in all such programs or activities. The Age Discrimination Act of 1975 provides that no person on the basis of age shall be excluded from participation under any program or activity receiving Federal financial assistance. Employment discrimination is not covered. Age discrimination in employment is prohibited by the Age Discrimination in Employment Act administered by the Equal Employment Opportunity Commission. Title IX of the Education Amendments of 1972 provides that no person in the United States on the basis of sex shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. Employment discrimination on the basis of sex is prohibited in all such education programs or activities. Note: an education program or activity is not limited to only those conducted by a formal institution. 40 C.F.R. Part 5 implements Title IX of the Education Amendments of 1972. 40 C.F.R. Part 7 implements Title VI of the Civil Rights Act of 1964, Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act, and Section 504 of The Rehabilitation Act of 1973. The Executive Order 13166 (E.O. 13166) entitled; "Improving Access to Services for Persons with Limited English Proficiency" requires Federal agencies work to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.

Items "Applicant" means any entity that files an application or unsolicited proposal or otherwise requests EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Recipient" means any entity, other than applicant, which will actually receive EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Civil rights lawsuits and administrative complaints" means any lawsuit or administrative complaint alleging discrimination on the basis of race, color, national origin, sex, age, or disability pending or decided against the applicant and/or entity which actually benefits from the grant, but excluding employment complaints not covered by 40 C.F.R. Parts 5 and 7. For example, if a city is the named applicant but the grant will actually benefit the Department of Sewage, civil rights lawsuits involving both the city and the Department of Sewage should be listed. "Civil rights compliance review" means any review assessing the applicant's and/or recipient's compliance with laws prohibiting discrimination on the basis of race, color, national origin, sex, age, or disability. Submit this form with the original and required copies of applications, requests for extensions, requests for increase of funds, etc. Updates of information are all that are required after the initial application submission. If any item is not relevant to the project for which assistance is requested, write "NA" for "Not Applicable." In the event applicant is uncertain about how to answer any questions, EPA program officials should be contacted for clarification. * Note: Signature appears in the Approval Section of the EPA Comprehensive Administrative Review For Grants/Cooperative Agreements & Continuation/Supplemental Awards form.



EPA KEY CONTACTS FORM

OMB Number: 2030-0020
Expiration Date: 06/30/2024

Authorized Representative: *Original awards and amendments will be sent to this individual for review and acceptance, unless otherwise indicated.*

Name:	Prefix: Mrs.	First Name: Maxine	Middle Name: Shoshone
	Last Name: Redstar		Suffix:
Title:	Tribal Chairwomen		
Complete Address:			
Street1:	PO Box 457		
Street2:	111 North Road		
City:	McDermitt	State:	NV: Nevada
Zip / Postal Code:	89421-0457	Country:	USA: UNITED STATES
Phone Number:	17755328259	Fax Number:	7755328487
E-mail Address:	maxine.redstar@fmpst.org		

Payee: *Individual authorized to accept payments.*

Name:	Prefix: Mrs.	First Name: Maxine	Middle Name: Shoshone
	Last Name: Redstar		Suffix:
Title:	Tribal Chairwomen		
Complete Address:			
Street1:	PO Box 457		
Street2:	111 North Road		
City:	McDermitt	State:	NV: Nevada
Zip / Postal Code:	89421-0457	Country:	USA: UNITED STATES
Phone Number:	17755328259	Fax Number:	7755328487
E-mail Address:	maxine.redstar@fmpst.org		

Administrative Contact: *Individual from Sponsored Programs Office to contact concerning administrative matters (i.e., indirect cost rate computation, rebudgeting requests etc).*

Name:	Prefix: Mrs.	First Name: Maxine	Middle Name: Shoshone
	Last Name: Redstar		Suffix:
Title:	Tribal Chairwomen		
Complete Address:			
Street1:	PO Box 457		
Street2:	111 North Road		
City:	McDermitt	State:	NV: Nevada
Zip / Postal Code:	89421-0457	Country:	USA: UNITED STATES
Phone Number:	17755328259	Fax Number:	7755328487
E-mail Address:	maxine.redstar@fmpst.org		

EPA KEY CONTACTS FORM

Project Manager: *Individual responsible for the technical completion of the proposed work.*

Name: **Prefix:** Mr. **First Name:** Duane **Middle Name:** Aaron

Last Name: Masters **Suffix:** Sr.

Title: Environmental Director

Complete Address:

Street1: PO Box 457

Street2: 111 North Road

City: McDermitt

State: NV: Nevada

Zip / Postal Code: 89421-0457

Country: USA: UNITED STATES

Phone Number: 17755328259

Fax Number: 17755328487

E-mail Address: dmasterssr@gmail.com

Other Attachment File(s)

* Mandatory Other Attachment Filename: 1234-FMPST FY23 CAA Grant Cvr Ltr Mrch 21 2022.doc

Add Mandatory Other Attachment

Delete Mandatory Other Attachment

View Mandatory Other Attachment

To add more "Other Attachment" attachments, please use the attachment buttons below.

Add Optional Other Attachment

Delete Optional Other Attachment

View Optional Other Attachment

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006
Expiration Date: 02/28/2022

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. EAQMC	66.034	\$	\$	493,802.00	\$	493,802.00
2.						
3.						
4.						
5. Totals		\$	\$	493,802.00	\$	493,802.00

Standard Form 424A (Rev. 7-97)
Prescribed by OMB (Circular A -102) Page 1

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1)	(2)	(3)	(4)	
	EAQMC				
a. Personnel	\$ 131,040.00	\$	\$	\$	\$ 131,040.00
b. Fringe Benefits	22,016.00				22,016.00
c. Travel	27,000.00				27,000.00
d. Equipment	169,000.00				169,000.00
e. Supplies	12,500.00				12,500.00
f. Contractual	106,000.00				106,000.00
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)	467,556.00				\$ 467,556.00
j. Indirect Charges	26,245.00				\$ 26,245.00
k. TOTALS (sum of 6i and 6j)	\$ 493,801.00	\$	\$	\$	\$ 493,801.00
7. Program Income	\$	\$	\$	\$	\$

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Prescribed by OMB (Circular A -102) Page 1A

SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program		(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8.	EAQMC	\$ 0.00	\$	\$	\$ 0.00
9.	N/A	0.00			0.00
10.	N/A	0.00			0.00
11.	N/A	0.00			0.00
12. TOTAL (sum of lines 8-11)		\$ 0.00	\$	\$	\$ 0.00

SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ 164,600.32	\$ 41,150.08	\$ 41,150.08	\$ 41,150.08	\$ 41,150.08
14. Non-Federal	\$				
15. TOTAL (sum of lines 13 and 14)	\$ 164,600.32	\$ 41,150.08	\$ 41,150.08	\$ 41,150.08	\$ 41,150.08

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program		FUTURE FUNDING PERIODS (YEARS)			
		(b)First	(c) Second	(d) Third	(e) Fourth
16.	EAQMC	\$ 164,600.33	\$ 164,600.33	\$ 164,600.33	\$
17.					
18.					
19.					
20. TOTAL (sum of lines 16 - 19)		\$ 164,600.33	\$ 164,600.33	\$ 164,600.33	\$

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges: 493,801.00	22. Indirect Charges: 26,245.00
23. Remarks:	

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Prescribed by OMB (Circular A -102) Page 2

Project Narrative File(s)

* **Mandatory Project Narrative File Filename:**

[Add Mandatory Project Narrative File](#)

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To add more Project Narrative File attachments, please use the attachment buttons below.

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Application for Federal Assistance SF-424

* 1. Type of Submission:

- ☐ Preapplication
☒ Application
☐ Changed/Corrected Application

* 2. Type of Application:

- ☒ New
☐ Continuation
☐ Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received:

03/25/2022

4. Applicant Identifier:

5a. Federal Entity Identifier:

88-0139377

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name:

Fort McDermitt Paiute and Shoshone Tribe

* b. Employer/Taxpayer Identification Number (EIN/TIN):

88-0139377

* c. Organizational DUNS:

0647914780000

d. Address:

* Street1:

PO Box 156

Street2:

111 North Road

* City:

McDermitt

County/Parish:

Humboldt

* State:

NV: Nevada

Province:

* Country:

USA: UNITED STATES

* Zip / Postal Code:

89421-0457

e. Organizational Unit:

Department Name:

Environmental Department

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

Mrs.

* First Name:

Maxine

Middle Name:

* Last Name:

Redstar

Suffix:

Title:

Tribal Chairwomen

Organizational Affiliation:

Fort McDermitt Paiute and Shoshone Tribe

* Telephone Number:

7755328259

Fax Number:

775-532-8487

* Email:

maxine.redstar@fmpst.org

Application for Federal Assistance SF-424

* 9. Type of Applicant 1: Select Applicant Type:

K: Indian/Native American Tribally Designated Organization

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

* 10. Name of Federal Agency:

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.034

CFDA Title:

Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities
Relating to the Clean Air Act

* 12. Funding Opportunity Number:

EPA-OAR-OAQPS-22-01

* Title:

Enhanced Air Quality Monitoring for Communities

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

Delete Attachment

View Attachment

* 15. Descriptive Title of Applicant's Project:

FMPST's goal is to meet the statutory and regulatory purposes

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

Application for Federal Assistance SF-424**16. Congressional Districts Of:**

* a. Applicant

2nd

* b. Program/Project

NV

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

17. Proposed Project:

* a. Start Date:

10/01/2022

* b. End Date:

09/30/2023

18. Estimated Funding (\$):

* a. Federal

493,802.00

* b. Applicant

0.00

* c. State

0.00

* d. Local

0.00

* e. Other

0.00

* f. Program Income

0.00

* g. TOTAL

493,802.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**☐ a. This application was made available to the State under the Executive Order 12372 Process for review on☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.☒ c. Program is not covered by E.O. 12372.*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**☐ Yes☒ No

If "Yes", provide explanation and attach

Add Attachment

Delete Attachment

View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix:

Mrs.

* First Name:

Maxine

Middle Name:

* Last Name:

Redstar

Suffix:

* Title:

Tribal Chairwomen

* Telephone Number:

7755328259

Fax Number:

775-532-8487

* Email:

maxine.redstar@fmpst.org

* Signature of Authorized Representative:

Duane A Masters Sr

* Date Signed:

03/25/2022

Duane Masters Sr.
PO Box 156 {McDermitt, NV 89421}
(775) 304-8413
dmasterssr@gmail.com

Objective	Environmental and Emergency Management
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Profile	<ul style="list-style-type: none">• Over 25 years experience as a professional manager.• Ability to direct complex projects from concept to fully operational status.• Goal-oriented individual with strong leadership capabilities.• Organized, highly motivated, and detail-directed problem solver.• Proven ability to work in unison with staff, volunteers, consultants, Federal agencies, state agencies, and Tribal Councils.
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Education	<p>Graduates Diploma, McDermitt Combined High School</p> <p>Northern Arizona University Certificate, Developing a Tribal Air Program</p> <p>University of Colorado at Colorado Springs Certificate, Radon Measurement</p> <p>University of Colorado at Colorado Springs Certificate, Radon Mitigation</p> <p>Inter-Tribal Council of Arizona Certificate, Water Treatment – Level 1</p> <p>Inter-Tribal Council of Arizona Certificate, Water Distribution – Level 1</p>
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Relevant Experience & Accomplishments	<p>Program Coordination</p> <ul style="list-style-type: none">• Successfully established new Fire Department and EMS Program through Nye County.• Balanced over \$900 thousand budget, resulting in impressive and monumental environmental accomplishments also Local, State, National, and Global notoriety.• Managed environmental projects that prevented mining to occur adjacent to Washoe County Residents and thorough investigations into preventable health issues related to mining for Lyon County residents.• Wrote grants, secured funding and established Radio communications for Fire and EMS in Nye County.• Reorganized Ambulance Barn with Tribal Council through professional meetings to house a new County Fire Truck.• Created an Emergency Response Team for RSIC and implemented Team during emergencies• Designed Emergency Response plans and conducted Emergency Response operations.• Counseled environmental staff on defining career and work related goals and objectives.• Procured wireless internet satellite services for entire YPT Community building and offices.• Successful in providing bottled water to YPT Campbell Ranch Residents for consumption.• Created the idea for a water treatment plant to remove Arsenic and Uranium at the YPT Campbell Ranch for safety reasons and worked diligently and collaboratively with federal agencies.• Formulated, wrote, and implemented Grants and scopes of work.
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Management/Supervision

- Directed recruitment and retention of supervisors and staff of up to 7 employees.
- Trained, supervised and evaluated staff, coached improvement management skills.
- Resulted in multilateral staff achievement of work objectives under different types of grants.
- Managed and developed Local, State, and Federal agencies into goal-oriented, cohesive group.
- Successfully refined and implemented new projects.

Employment	Environmental Director , Fort McDermitt Paiute and Shoshone Tribe of Nevada and Oregon, McDermitt, NV	<i>Feb. 2008-</i> <i>Present</i>
	<ul style="list-style-type: none">• Oversight of all departments in the Environmental program, grants, and contracts.• Prepares and reviews environmental reports required by EPA.• Worked with EPA Regions 9 and 10 on historic mercury mine cleanups in the Town of McDermitt and on the Reservation• Worked to assist in the closure of the Opalite Mercury Mine in Oregon• Develops Environmental programs for EPA compliance for the Tribe• Keeps Tribal Council abreast of all issues involving the Lithium Mine.	
	Environmental Director , Yerington Paiute Tribe, Yerington, NV	<i>Sept 2002</i> <i>Feb 2008</i>
	<ul style="list-style-type: none">• Oversight of all departments in the Environmental program, grants, and contracts.• Prepares and reviews environmental reports required by EPA.• Develops Yerington Paiute Tribal Environmental programs for the betterment of the Tribe• Keeps Tribal Council abreast of all issues involving the Yerington Mine.	
	Emergency/Environmental Coordinator , Reno-Sparks Indian Colony, Reno, NV	<i>April 2000-</i> <i>Sept. 2002</i>
	<ul style="list-style-type: none">• Oversaw operations of daily emergency and environmental programs.• Provide technical expertise in preparing and recommending long-range plans for the implementation by the RSIC of a Reservation wide Tribal Environmental Plan, Emergency Response Plan, and Environmental Ordinances.	
	Maintenance , Yomba Shoshone Tribe, Reese River, NV	<i>Sept 1996-</i> <i>April 2000</i>
	<ul style="list-style-type: none">• Supervise the general maintenance of all tribal buildings.• Responsible for tribal mechanic duties, carpentry, plumbing, and electrical duties.• Conducted water quality monitoring for the Public Water System and provided safe and healthy drinking water to the public.	
	Volunteer Fire Chief , Nye County Fire & EMS, Nye County, NV	<i>May 1998-</i> <i>April 2000</i>
	<ul style="list-style-type: none">• Supervised structural and wildland fire fighters in performance of duties.• Conducted monthly meetings and trainings, helped write grants and support letters to County.• Conducted safety checks on Tribal buildings in Yomba	

Nye County Ambulance Coordinator, Nye County Fire & EMS, Nye County, NV

*Feb. 1997 -
April 2000*

- Supervised Ambulance attendants in performance of duties.
- Conducted monthly meetings and trainings, ordered supplies for Ambulance services.
- Responsible for financial budgeting of services.

**Community
Involvement**

Captain, Walker River Paiute Tribe Volunteer Fire Department.

Public Servant as a Wildland and structural Fireman for Fire Services for 27 years.

Public Servant as an Emergency Medical Technician for 9 years.

**Honors &
Awards**

Recipient of numerous certifications in Fire Response, Hazardous Material Response, Emergency Medical Services, and Environmental Awareness Trainings, Attendance, and Achievements.

March 22, 2022

Environmental Protection Agency

Re: Letter of Support Enhanced Air Quality Monitoring for Communities

To Whom it May Concern:

Lithium Nevada Corp. ("LNC") is currently developing the Thacker Pass Mine within the same region as the Fort McDermitt Paiute Shoshone Reservation. We have completed our air quality permit with the Nevada Division of Environmental Protection and provided our air quality/meteorological data to the Tribe to be used to scope their program. To supplement the available representative air quality data for the region, we are happy to support the tribe in their monitoring efforts.

LNC looks forward to working with the Tribe's Environmental Office to collect and provide environmental data, along with other assistance and collaboration, as the Thacker Pass Project moves forward.

Kind regards,



Alexi Zawadzki, CEO

Lithium Nevada Corp.

Project Title

Fort McDermitt Paiute and Shoshone Tribe Air Quality Monitoring Infrastructure

Applicant Organization

Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation

Quality Assurance Statement

The Environmental Director is responsible for quality assurance and quality control. The position is currently held by Duane Masters Sr. and his resume is attached. Day to day quality review and reports on data quality will be provided the Air Quality Coordinator, an unfilled and unfunded position pending this grant.

The Environmental Office utilizes EPA Region 9 QA Office reviewed QAPP(s) to outline the steps for evaluating and using data from its programs. The Tribe currently has a QAPP for water quality monitoring and a second for air quality that will be updated for pending funding of this program. This update is required to comply with additional equipment, time lapse since prior air quality programs and the need for strong QAPPs that clearly outline data collection procedures, evaluation and use. QAPP are consistent with guidance including “EPA Guidance for Quality Assurance Project Plans” (EPA QA/R-5) and for air QAPPs, “Guide to Writing Quality Assurance Project Plans for Ambient Air Monitoring Networks” (EPA-454/B-18-006). Quality control will also include steps and analysis associated with monitoring. The data will be added to AQS for public use.

The objectives of this monitoring project are to determine the ambient air quality within the boundaries of the Reservation including trends and whether or not air quality standards are exceeded (and tribal air quality standards, once adopted). Table 1 is provided below to summarize a brief application of the DQO process to this program

Table 1. DQO process summary

Step 1. State the Problem

The Tribe is concerned about fugitive dust emissions from the nearby abandoned mine sites and other sources, emissions from planned lithium mining, wildfires and other sources common in rural, primarily agricultural communities.

Step 2. Identify the Goals of the Study

To determine if air quality conditions are creating unhealthy conditions on the Reservation and Colony.

Determine impact of fugitive dust emissions from abandoned mines

Determine impact of other sources including agricultural related particulate emissions.

Determine impact of sulfur dioxide emissions from lithium mining

Determine impact of ozone from transportation, wildfires, wood burning for heating and other sources

Determine which and how much of these emission sources are creating unhealthy conditions for members of the Tribal Reservation and Colony.

Step 3. Identify the Information Inputs

- Historical meteorological data
- Plan reservation monitoring both meteorological and air quality

Step 4. Define the Study Boundaries

The airshed is defined as the Quinn River Valley. The air quality monitoring is located near the principle tribal housing area on the Reservation with data expected to measure exposure expected in the Tribal residential area. Additional meteorological data will be collected at a second location on a detached section of the Reservation closer to the lithium mining.

Step 5. Develop the Analytic Approach

- *If* data exceeds NAAQS of 150 $\mu\text{g}/\text{m}^3$ more than once every 3 years.
- *If* data exceeds other health-based standards such as the annual California 24-hour Standards/
- *If* trends show increases with time

Then the Tribe will use the associated meteorological data and data from non-Tribal monitoring programs to determine possible sources. The Tribe can then work with NDEP or EPA, depending on the source, to address the issue. The Tribe can also ensure that other appropriate measures are taken to protect Tribal members, including those sensitive to poor air quality.

Step 6. Specify Performance or Acceptance Criteria

Tolerable limits on analytical data are part of the QAPP update process. Additional detection limits are to be provided to specify the sensitivity of the study; elevated detection limits can delay detection of increasing trends.

Step 7: Develop the Plan for Obtaining Data

Releases from the nearby McDermitt Mercury Mine and other fugitive dust issues in the valley have been noted by resident. An outlined plan will be provided as part of the QAPP update.

In summary, continuous, real-time data will be compared to standards and meteorological data. When or if the levels exceed action limits, the Tribe will work with NDEP and others to control emissions. The number of monitoring locations is a function of budget and existing data; however, the equipment is located in the residential area of the Reservation with the intent to estimate exposure to residents. Dust events have been documented year-round at the Reservation creating the need for year-round monitoring.

COVER PAGE

Project Title

Fort McDermitt Paiute and Shoshone Tribe Air Quality Monitoring Infrastructure

Applicant Organization

Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation

Address: 111 North Reservation Road, PO Box 457, McDermitt, NV 89421

Primary Contact: Duane Masters Sr., Environmental Director

Telephone (775) 532-8259 Ext. 104, FAX (775) 532-8487 dmasterssr@gmail.com

DUNS NUMBER: 0647914780000

Set Aside: Tribal Set-Aside

Brief Description of Applicant Organization

The Fort McDermitt Paiute and Shoshone Tribe (FMPST) is a Federally Recognized Tribe. This program will compliment ongoing Environmental Programs including USEPA Brownfields, USEPA GAP and others in a mature Environmental Office. The Environmental Program addresses groundwater, surface water, invasive species, Brownfields and periodically air quality issues on and affecting the Reservation.

Project Partners

No direct project partners are proposed although the program will include data generated by the only air monitoring in the airshed by Lithium Americas in support of permitting for the Thacker Pass Lithium Mine (brief program now ended) and coordinated with Nevada Division of Environmental Protection (NDEP). The intent of these partnerships is to coordinate efforts, leverage proposed programs, and utilize historic data.

Project Location

The Reservation is located approximately, 4 miles southeast of McDermitt, Nevada and 70 miles north of Winnemucca, Nevada. The Reservation straddles the Nevada-Oregon Border, with approximately 40% of the reservation located in Humboldt County in Nevada and the remaining 60% within Malheur County in Oregon. The Tribal housing is located in Humboldt County, NV. Land status is 35,183.31 acres of Federal Trust, 145 acres allotted.

Air Pollutant Scope: Particle Pollution, PM10, PM2.5, Ozone, Sulfur Dioxide

Budget Summary

EPA Funding Requested	Total Budget Costs
\$493,802	\$493,802

Project Period: Project start is proposed for December 1, 2022 ending on November 30, 2025.

Short Project Description

The goal of this project is to establish air quality monitoring for the Reservation by providing for the initial cost of installation of infrastructure require for air quality monitoring, staff training and capacity building. The program will provide the facilities and data for scoping a longer term, permanent air quality monitoring program and provide meteorological data to support water resources projects. The issues to be addressed include air quality pollutants from known sources due to historic mining, wildfires, agriculture and vehicles plus planned and currently permitting mining in the airshed (Quinn River Valley).

Fort McDermitt Paiute and Shoshone Tribe Air Quality Monitoring Infrastructure
March 25, 2022

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1 Work Plan

1.1 Project Summary and Approach

1.1.1 Pollution Scope

There are a number of air quality issues that this program will target:

- **Transportation:** Hwy 95, a major north/south route for the Western United States, goes through the Reservation including the residential area. Ozone will initially be monitored although the system can be expanded to include VOCs and other transportation related pollutants.
- **Historic Mining:** there is a history of mercury and gold mining and exploration in the region in addition to a current lithium mining project. The historic mercury mining is problematic due to the use of mercury mine tailings on the Reservation resulting in EPA Region 9 removals. Other concerns include fugitive dust emissions from abandoned mines adjacent to Tribal property. Mercury mine tailings had been used for road construction through the residential area of the Reservation resulting in surface soils/material with elevated concentrations of mercury and arsenic (Ecology and Environment, Inc., 2012). Concentrations of mercury in surface soils were found to be up to 110 mg/kg mercury and 73 mg/kg arsenic in the Tribe's residential area. Although hazardous air pollutants such as mercury and arsenic are not part of this program, measuring particulates is a step toward determining if those efforts should be prioritized.
- **Proposed Mining:** The Environmental Impact Statement (EIS) and NDEP permits for the Thacker Pass Lithium mine are complete and construction is due to start this year. The facility will include sulfur dioxide (SO₂) emissions of approximately 41.9 tons per year but will rely on a complex system to remove sulfur dioxide from air emissions. The facility will monitor emission and the Tribe is coordinating with the owner, Lithium Americas, to mirror the monitoring providing important downwind data mindful of the health of Tribal members.
- **Burning:** all homes on the Reservation burn wood for heat. In addition, the region is plagued by annual wildfire events that result in advisories and other indicators of poor air quality. The largest wildfire in Nevada history, the 439,230-acre Martin Fire, occurred in July of 2018 and started just south of the Reservation. Air quality issues related to that, and other local fires persisted throughout the summer and early fall of that year. For the winter months, woodstove use, almost 100% of the Reservation homes, combined with inversions and other sources, can result in visibly impaired air quality on the Reservation.

The Tribe is leveraging data from the Thacker Mine permitting process and will coordinate with their monitoring effort although it is notable that these will be almost 30 miles apart despite being in the same airshed. In addition, The Tribe is working with NDEP, proposed air quality measures will be near Tribal housing located in Nevada, to provide data comparable to similar monitoring efforts throughout the state.

1.1.2 Tasks and Schedule

This project will include the follow tasks:

- Project Initiation (Quarter 1-2)
 - Advertise for the position and hire air quality coordinator
 - Develop office space and administrative needs for the Air Quality Program
- Program QA/QC (Quarter 2-3)
 - Develop an Air Emissions Inventory
 - Update the QAPP(s) for the program (includes design of system and final method and equipment decisions)
- Establish Locations for Air Monitoring/Met Stations (Quarter 2)
 - Propose Locations to Tribal Council
 - Designate use of Tribal Property by Council Resolution
- Install Meteorological Monitoring Equipment (Quarter 2-3)
 - Select two locations
 - Purchase and Install Equipment
- Install Air Quality Monitoring Equipment (Quarter 3-4)
 - Select and Purchase Equipment
 - Install equipment co-located with met station in the residential area
 - Install Flag system for air quality and provide related public outreach
- Other Tasks (Duration of 3-year project)
 - Training events
 - Council Updates
 - Quarterly project Reporting
 - Data review and upload to AQS
 - Final Report

1.1.3 Community Partnerships and Engagement

These tasks will result in an increased capacity for the Tribe to protect the health of members and target specific air quality issues with a designated priority appropriate for the risk generated. In addition, public outreach efforts including flag systems to indicate air quality status and public presentations through the often well attended public Tribal Council meetings will provide a foundation of public participation throughout the effort. As specified above and indicated in the support letters, the Tribe has established relationships with NDEP and Lithium Americas to optimize use of regional data, collaborate with other data users and producers, optimize use of local expertise and work towards standardize methods to ensure data utility by other agencies.

1.1.4 Air Monitoring Technology

The project will utilize commercially available technology and equipment consistent with EPA procedures such as those found in EPA's Compendium of Methods for the Determination of

Toxic Organic Compounds in Ambient Air. This project does not include research, development, demonstration or evaluation of new methods or materials.

Meteorological Stations

Two meteorological stations will be purchased and set up. Expected units will be, or resemble, those available from companies such as Campbell Scientific, with datalogging, solar, and cellular compatible, see Table 1.

Table 1. Met station specifications.

Unit	Range	Accuracy
Wind Monitor	0-100 m/s	0.3 m/s
Temperature	-40-70 C	0.1 C
Humidity	0-100% RH	1.5%
Barometer	500-1100 hPa	0.15 hPa
Pyranometer	0-2000 W/m ²	1%
Rain Gage	NA	0.01 inch
Tripod	Up to 75 mph sustained	150 mph gust

Air Quality Measurements

Air quality sampling and analysis will be conducted according to EPA procedures using equipment proven reliable by other regional Tribes. Examples of equipment to be considered are provided in Table 2. Final decisions for equipment and system design will occur as the QAPP is developed.

1.1.5 Quality Assurance and Quality Control

This project includes updating a QAPP for metrological and air quality measurements consistent with guidance including “EPA Guidance for Quality Assurance Project Plans” (EPA QA/R-5) and “Guide to Writing Quality Assurance Project Plans for Ambient Air Monitoring Networks” (EPA-454/B-18-006). Quality control will also include steps and analysis associated with field documentation and sample validation. The data will be uploaded at regular intervals to AQS for public use.

Table 2. Methods equipment information for air quality measurements

Parameter	Example Method	Comments
Sulfur Dioxide	T-API Model T100 SO2 analyzer	UV fluorescence method
Ozone	T-API Model T400 O3 analyzer	UV adsorption method
Particulates	T-API Model T640X PM analyzer	Includes external flow system and sample head to conduct both PM10 and PM 2.5.
Mercury and arsenic	To be determined	Both are expected to be particle bound, method will most likely

		be XRF analysis of Mini-vol or Hi-vol filter.
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1.2 Project Significance

The Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation is a Federally Recognized Tribe that was organized under the Reorganization Act of June 18, 1934 (48 Stat. 984) as amended. The Constitution and By-Laws of the Fort McDermitt Paiute and Shoshone Tribes was approved on July 02, 1936. The Reservation was established on July 5, 1889 and is geographically situated in Malheur County Oregon and Humboldt County Nevada, EPA Region 10 and Region 9. However, with housing and administration offices are located in Nevada, the Tribes EPA funded programs are managed through Region 9.

The Fort McDermitt Tribal Council is the governing body of the Fort McDermitt Paiute and Shoshone Indian Reservation with approximately 1,500 enrolled members with over 300 individuals living on the Reservation.

Tribal members on the reservation are exposed to historic mine waste, an issue shared with the larger community in the nearby town of McDermitt. Air quality issues associated with the Quinn River Valley that includes the residential portion of the Fort McDermitt Reservation and the towns of McDermitt and Orvada as well as other residents in the Valley include wildfire and industrial emissions such as sulfur dioxide from the pending Thacker Pass Lithium Mine. These are in addition to the emissions from transportation and area agriculture.

The proposed monitoring system will be the only publicly funded air quality monitoring located in Humboldt County, NV. The Nevada Division of Environmental Protection (NDEP) does not have air quality monitoring in Humboldt County or adjacent areas (<https://ndep.nv.gov/air/air-quality-monitoring/monitoring-sites-network>). The Oregon Department of Environmental Quality does not operate air quality monitoring in Malheur County (<https://www.oregon.gov/deq/aq/Pages/Air-Quality-Monitoring.aspx>). In fact, NDEP only operates 5 air quality monitoring stations outside of the more populated Washoe and Clark counties. One of the most important impacts of the monitoring will be to coordinate and exchange data with state agencies. Of note, the Quinn River Valley extends into Oregon resulting in two state agencies involved in a single air basin.

In addition to air quality monitoring needs, the proposed monitoring will provide metrological data to support water resources assessment ongoing for the Tribe.

2 Community Involvement

2.1 Community Partnerships

There are no partnerships that include deliverables for this program. However, the Tribe is working with both the NDEP and Lithium Americas to scope this program. These activities may include the following efforts:

- NDEP has offered to provide expertise on equipment selection and is interested in the Tribe's data as they seek to expand their air quality monitoring program to the region.
- Lithium Americas has provided the historical data from their metrological monitoring in support of their permitting and committed to providing additional data as collected. It should be noted that this data is publicly available through NDEP but an agreement between them and the Tribe will ensure more timely availability in a more desirable format.

In addition to using NDEP resources to develop this proposal, the Tribe has reached out to the Yerington Paiute Tribe and La Posta Band of Mission Indians as informal resources to support development of the program. Sample QAPPs, air emissions inventory, cost information and advice on monitoring has already been obtained.

2.2 Community Engagement

Community engagement efforts will include initiation of a flag systems to indicate air quality status and public presentations through the often well attended monthly public Tribal Council meetings. In addition, air quality status and updates provided to Council will also be provided on the Tribes social media.

To educate the public on the flag system, a flyer will be distributed to all homes on the Reservation and posted at the Tribal Administration Building. Additionally, the flyer will be posted to the Tribe's social media.

3 Environmental Justice and Underserved Communities

Using the EPA's Environmental Justice Screening and Mapping Tool

(<https://www.epa.gov/ejscreen>), various air quality parameters on the Fort McDermitt Indian Reservation were compared to state and national levels. Due to the scale of this mapping tool and the rural location of the Reservation, the levels of air pollution discrepancies listed below do not entirely reflect the extent to which the Tribe is affected. Tribal members in this area have socioeconomic indicators, including lower income level and education level, race, and age, that may make them susceptible to pollution exposure and related impacts.

Some of the highest discrepancies in parameters to national averages include ozone, lead paint, PM2.5, and air toxics cancer risk. The population of the Fort McDermitt Tribe resides in areas

that are in the 86th, 78th, 62nd and 59th percentiles of national levels for these parameters, respectively. Along with these hazardous levels of air pollution, they are also subject to dangerous levels of wildfire smoke. Most of the Reservation and surrounding areas are categorized as having high to very high wildlife hazard potential which is reflected in recent wildfire events.

4 Environmental Results - Outcomes, Outputs and Performance Measures

Short term outcomes will include enhanced community awareness of air pollution by providing updates and educational opportunities, quantification of current air pollution issues to identify risk, and improvements in the capacity of the Tribal government to measure air pollution by providing for the air monitoring infrastructure.

Intermediate outcomes will include an ability to coordinate with state agencies regulating mining and other air quality contributors regarding conditions on Tribal property. This data can drive regulation of the emitting facilities as well as transportation infrastructure and prioritization of wildfire prevention. Intermediate community outcomes can include determining what actions such as wood burning restrictions et cetera should be prioritized.

Long term outcomes are the overall reduction of air pollutants identified by the program as problematic and less human exposure to certain air pollutants.

In addition, the program will provide the infrastructure and training for an air quality program that then can be maintained using programs such as EPA GAP and CAA 103 grants.

Expected outputs from the project include:

- Identification of air pollutants: despite issues with wildfires and development, this will be some of the first assessment of air quality for the region. A goal of the project is to determine and prioritize air quality issues. For example, if elevated particulates are found, the next step will be to measure HAPs such as arsenic and mercury that are known to be elevated in mine waste used as soil surface cover.
- Community-specific assessments of air pollution data: the program uses known issues with wood burning, wildfires, historic environmental issues such as mining, and planned developed to create a program specifically targeting regional conditions.
- Deployment of Equipment to conduct air quality monitoring in or near underserved community: the Fort McDermitt Reservation reports an unemployment rate greater than 50% and has issues detailed above in the Environmental Justice section.
- Near real-time air quality data availability for communities and other stakeholders: although data flow will be complicated due to the nature of rural internet and cellular service, the project includes social media updates and a flag system to update the community on air quality conditions.

- Promotion of partnerships and community involvement through various activities and information exchanges: as indicated above, the program will work with other air quality agencies (NDEP) and data users (Lithium Americas), update Tribe leadership monthly and provide updates to the public through Tribal Council meetings and social media.

Performance measures for the program will include including data on vendor bids and performance (all vendors are expected to follow the Tribe's procurement policy) in quarterly reporting, providing financial tracking data in all reporting and reporting milestones and status of deliverables in regular reporting.

5 Performance Measures and Plan/Timeline and Milestones

The program schedule is provided in Table 3.

Table 3. Program schedule.

Duration	ID	Task Name	Start	Finish	2023				2024				2025			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
87d	1	Hire air quality coordinator	12/1/2022	3/31/2023												
325d	2	Create office space for program coordinator	1/17/2022	4/14/2023												
45d	3	Air Emissions Inventory	2/17/2023	4/20/2023												
44d	4	QAPP Update	4/21/2023	6/21/2023												
22d	5	Set locations for equipment	5/29/2014	6/27/2014												
132d	6	Purchase and install equipment	6/15/2023	12/15/2023												
21d	7	Install Flag System/Outreach for flag system	12/1/2023	12/29/2023												
599d	8	Collect Met data	8/15/2023	11/28/2025												
521d	9	Collect Air Quality data	12/1/2023	11/28/2025												
32d	10	Interim Report for start of monitoring	12/1/2023	1/15/2024												
34d	11	Final Report	10/1/2025	11/17/2025												

Reporting will include quarterly reports with data added to AQS at a minimum of quarterly. Reports to the Tribal Council are monthly, schedule set by the Council but currently the first Wednesday of every month.

6 Quality Assurance Statement

As directed in Appendix B, Page 35 of the request for proposals, the quality assurance statement is submitted as an optional attachment.

7 Programmatic Capability and Past Performance

On November 21, 2011, the Tribe was successful in getting a Radon Quality Assurance Project Plan approved by Region 9 EPA and successfully conducted Radon monitoring of homes on the reservation, along with collecting the data collectors and analyzing the results, the community was better informed. The radon program is considered complete for the Tribe at this time and the QAPP will not be re-submitted until additional radon testing is required.

7.1 Past Performance

Since 2008 the Tribe has received EPA-GAP funding every year and over the last few years, EPA Brownfields funds with positive results from the EPA Indian Programs Manager and the EPA Project Officers. In general, the Tribe has managed to successfully complete the deliverables in the GAP Workplan every year with only minimal delays recently due to Covid.

7.2 Reporting Requirements

All of our Quarterly Reports were submitted on time, along with every End Of Year Report. Only one item was not completed due to Covid 19 which was the purchase of a trailer to haul trash, the company closed and never re-opened, instead we had to pay a contractor to haul trash to the landfill over 75 miles away.

7.3 Staff Expertise

Resumes are attached. It is notable that the Environmental Director has attended the National Tribal Forum on Air Quality Management & Policy, and the National Tribal Science Forum on an ongoing basis to keep abreast of air quality and climate change initiatives. At the direction of the Tribal Council due to member concerns, the program has submitted for air quality monitoring for previous programs with limited success. Air quality has been a priority for the Tribe for several years.

8 Budget and Budget Detail

The Budget is provided in Table 4.

PERSONNEL/SALARIES AND WAGES:

Salaries are requested for a full time employee for 3 years who will manage the sampling equipment, public outreach and contractors. In addition, they will assist with data input and presentations to council along with reporting. Fringe is a current estimate of salaries and benefits for the Tribe.

TRAVEL:

The Fort McDermitt Reservation is nearly 500 miles round-trip to the nearest reasonable commercial airport (Reno, NV and Boise, ID). Mileage is included for travel to Reno (500 miles) and Winnemucca (75 miles) for meetings, training and to pick up equipment. In addition, Tribal air quality programs are generally travel heavy for training.

OFFICE SUPPLIES

Office supplies are to establish a new office in existing space. Computers and printers are typically below the equipment cost minimum and included in supplies.

Table 4. Budget

Personnel				
	Air Quality Coordinator (1 FTE x 3 years)			\$153,056
	21.00 per hour X 6240 working hours		\$131,040	
	Fringe Benefits @ 16.2% of gross wages			
	Employer mandated taxes		\$20,966	
	Payroll processing fees 350 per year		\$1,050	
Travel & Training				\$27,000
	To attend training, workshops, and			
	Conferences related to air quality			
Office Supplies:				\$12,500
	General office supplies, utilities,		\$5,000	
	Computers and printers		\$7,500	
Equipment				
	Met station (x2)		\$30,000	\$169,000
	Conex modified to house equipment		\$65,000	
	Sulfur Dioxide analyzer		\$15,000	
	Ozone analyzer		\$14,000	
	Particulates analyzer		\$45,000	
Contractual				\$106,000
	Consultant to write QAPP and support Emissions			
	Inventory development		\$23,000	
	Equipment set up		\$25,000	
	Reporting and Data analysis		\$28,000	
	Support for equipment maintenance		\$30,000	
Indirect				\$26,245
	Amount subject to indirect		\$192,556	
	Rate		13.63%	
TOTAL				\$493,802

EQUIPMENT

Equipment is as specified. Additional supplies are not included, contractors will be required to provide supplies or services during the term of the program (equipment will be expected to be purchased with supplies to operate it for a minimum of 24 months).

CONTRACTUAL

Contractual is divided into basic services expected to be needed during the program. Support is expected to set up the program, set up the equipment, provide analysis and support reporting along with assistance with maintenance. Vendor selection will follow the Tribe's procurement policy.

INDIRECT RATE

The indirect rate is based on the most recent audit and agreement for the Tribe and is applied to operations on the Tribe. Contractual and equipment is excluded.

9 References

Ecology and Environment, Inc. (2012). *Mine Waste Removal Assessment at Properties of Release or Threatened Release McDermitt, Humboldt County, Nevada and Malheur County Oregon*. San Francisco, CA: US EPA.

B. DIETRICK MCGINNIS, Ph.D, PE, CEM

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Education

- Ph.D. Civil Engineering. University of Nevada, Reno. 1998. Dissertation Title "Degradation of Ethylene Glycol by Dye-Sensitized and Hydroxyl Radical Oxidation". E. Joe Middlebrooks, advisor (retired).
- M.S. Civil and Environmental Engineering. Utah State University. Logan, Utah. 1995. Thesis Title "Biocontainment of Hydrocarbons in a Shallow Aquifer". R. Ryan Dupont, advisor.
- B.S. Wood Science and Technology. Mississippi State University. Starkville, Mississippi. 1990. Senior Thesis "Determination of Pentachlorophenol Retention by X-Ray Fluorescence Using Split Borings from Treated Southern Yellow Pine Poles".

Work Experience

President, McGinnis and Associates, LLC, Reno, NV, 1989 to present.

- Government to government relation assignments including experience with Tribal Governments, NRDA, and Superfund technical support.
- Watershed and wetland planning and restoration including infrastructure/road rehabilitation.
- Providing economic, energy and environmental program development support for Tribes and Local Governments.
- Implementing site cleanup activities including site characterization and assessment. Assignments include managing contractors and working with federal and state regulatory agencies.
- Support for monitoring programs for water, soil, biota and air including radiological and pesticide assessments and drinking water/wastewater systems.
- Design and implementation of BMPs for Non-point pollution prevention including SWPPP.

Assistant Research Professor, University of Nevada, Reno, 1998.

- Developed funding resources and research initiatives for the National Disaster Resource Center for Wood Structures, a partnership between the USDA Forest Products Laboratory, the University of Nevada, Reno, the University of North Dakota and Michigan Technological University.
- Coordinated with lobbyist from member universities for direct appropriations; an earmark successfully placed on the 1999 budget sponsored by Senators Reid and Dorgan.

Research Assistant University of Nevada, Reno, Department of Civil Engineering, (1995-1998). In addition to Ph.D. research responsibilities:

- Maintained and performed analysis on multiple ICP, high performance liquid chromatography, ion chromatography and gas chromatography units.

Research Assistant, Utah State University, Department of Civil and Environmental Engineering, Logan, Utah (1992-1994). In addition to M.S. research responsibilities:

- Maintained and performed analysis for metals on Perkin Elmer Inductively Coupled Plasma units.
- Developed methods for and performed analysis with high performance liquid chromatography, ion chromatography and gas chromatography (flame ionization and electron capture detectors) units.

Summer Internship, International Paper, Wiggins, MS, Deridder, LA, and Joplin, MO (1989).

- Development of quality control methods for PCP treated poles at multiple plants.
- Development of X-Ray Fluorescence methods for in-plant and field use.

Laboratory Technician, Mississippi State Chemical Labs, Miscellaneous Lab, Mississippi State University, Starkville, MS, March 1984 to October 1990.

- Conducted general drinking water quality and wastewater permit analyses.
- Developed procedures for food and beverage quality testing and labeling, including analyses for specific phosphorus compounds, product tampering, nutritional value and a variety of specialty analyses that involved adapting procedures from several sources.

Recent Consulting Experience

2017-2019	Technical support for the Walker River Paiute Tribe Environmental Program. Yerington, NV. Tasks include review of work plans and data/data validation relating to the Anaconda Mine Superfund Site and participation in the Technical Working Group. (current project)
2012-2019	CEM, Mohave Generating Plant, Laughlin, NV for Hamilton Geotech/Southern California Edison (current project)
2000-2019	Technical support for the Yerington Paiute Tribe Environmental Program. Yerington, NV. Tasks include review of work plans and data/data validation relating to the Anaconda Mine Superfund Site and participation in the Technical Working Group. (current project)
2006-2019	Technical Advisor for CLEAN under their Superfund Technical Assistance Grant (TAG) for the Lowery Landfill Superfund site. Aurora, CO. Responsibilities include review of PRP generated data describing groundwater plumes of heavy metals and chlorinated solvents including PCE in residential/commercial areas. (current project)
2009-2019	Caseworker for the Yerington Paiute Tribe. Yerington Mine Natural Resources Trustee Council. (current project)
2014-2019	Technical support for wetland restoration and erosion control. La Posta Rancheria, San Diego County, CA. (current project).
2019	Project manager, SWPPP installation and permitting, Hwy 396 improvements. Subcontracting via Parr Electric for Nevada Division of Transportation.
2015-2018	Technical support, Climate Change Planning Program for the 27 Tribes of Nevada, Inter-Tribal Council of Nevada (current project)
2016	Technical support, development of gravel resources on the Round Valley Tribes Reservation, Covello, CA.
2014-2016	Technical Advisor for the Elem Indian Colony, Sulphur Bank Mercury Mine Superfund Site. Lake County, CA.
2014-2016	Technical Advisor for the Elem Indian Colony, USFW TWG and GAP EPA programs. Lake County, CA.
2007-2015	Groundwater modeling and support for water resource management. Habematolel Band of Pomo Indians. Upper Lake, CA.
2010-2014	Implementation and management of the Hitch Adaptive Management Plan. Habematolel Band of Pomo Indians. Upper Lake, CA. Funded through the U.S. FW Tribal Wildlife Program.

Participation in Professional Organizations and Seminars

- Professional Engineer (PE) Nevada 16257
- Certified Environmental Manager, State of Nevada, EM-1785
- Water Pollution Control Manager, NCA-NDOT. February 2018.
- Hazardous Waste Operations and Emergency Response Training (HAZWOPPER) in accordance with 29 CFR 1910.120. Truckee Meadow Community College, January 10-14, 2005. Updated January 2020
- ASTM Technical & Professional Training Course on Phase I-II ESAs, November 27-29, 2012 in Las Vegas, NV. Confined Space Entry Train-the-Trainer, Truckee Meadow Community College, July 27, 2005
- Order of the Engineer
- American Water Works Association
- Yerington Mine CERCLA Site Technical Working Group
- Lowery Landfill Superfund Site Technical Working Group

Selected Recent Proposals

A Climate Change Vulnerability Assessment for Habematolel Pomo Tribe Water Resources, BIA Water Resources. For the Habematolel Pomo Tribe of Upper Lake. 2012. \$50,000. Funded.

Upper Lake Basin Water Quality Assessment and Restoration Native American Affairs Program Technical Assistance Program, U.S. Bureau of Reclamation, For the Habematolel Pomo Tribe of Upper Lake. \$150,000 (3 years starting in 2010). Funded.

Demonstration Project Integrating Wetland Restoration and Water Management for Increased Walker Lake Inflows. For the Yerington Paiute Tribe to the National Fish and Wildlife Foundation. 2011. \$327,000. Funded.

Clear Lake Hitch Recovery Project, U.S. Fish and Wildlife Service FY 09 Tribal Wildlife Grant Application. For the Habematolel Pomo Tribe of Upper Lake. 2010. \$172,000. *Funded*.

Clear Lake Hitch Recovery Project, U.S. Fish and Wildlife Service FY 09 Tribal Wildlife Grant Application. For the Habematolel Pomo Tribe of Upper Lake. 2008. \$48,000. *Funded*.

Clear Lake Hitch Recovery Project, U.S. Fish and Wildlife Service FY 09 Tribal Wildlife Grant Application. For the Big Valley Rancheria. 2008. \$50,000. *Funded*.

Clear Lake Hitch Recovery Project, U.S. Fish and Wildlife Service FY 09 Tribal Wildlife Grant Application. For the Robinson Rancheria. 2008. \$194,936. *Funded*.

Big Valley Septic System Rehabilitation. 2008. \$97,000. *Funded*.

Robinson Rancheria of Pomo Indians Energy and Mineral Development Program (EMDP). BIA. FY 2007 Application. 2006. \$59,610. *Not Funded*.

First Steps Toward Developing Renewable Energy And Energy Efficiency On Tribal Lands, Robinson Rancheria for the 6 Federally Recognized Tribes of Lake County, CA. 2006. \$100,000. *Funded*.

Economic analysis and technical report for Ecofirst, an electronics recycling company. Plumas County, CA. 2004. \$22,200. *Funded*.

Development of QAPP and SAP for water quality and pesticide drift sampling, Big Valley Rancheria. 2003 - 2004. \$9,000. *Funded*.

Water Quality monitoring for the Elem Rancheria and associated sections of the Sulfur Bank Superfund Site. 2004. \$22,000. *Funded*.

Preparation of a 305b Report and water quality QAPP for the Elem Rancheria including review of the Sulfur Bank Superfund Site. 2003. \$22,000. *Funded*.

Environmental Assessment for the Guidiville Band of Pomo Indians. 2001. Submitted to the Guidiville Band EPA. \$14,500. *Funded*.

Remediation of Irrigation Return Water Using Hybrid FWS Wetlands. 2001. Submitted to USEPA, Regional Wetland Grants. \$110,000. *Not Funded*.

Development of Air Quality Models for Particulates and Toxic Emissions from The Anaconda Mine Site, Phase II, Monitoring and Continued Model Development. 2001. USEPA Region 9 Indian Programs (Project with the Yerington Paiute EPA). \$150,000. *Funded*.

Applied Research Initiative Program Grant. 2001. Desert Research Institute, Reno, NV. \$11,200. *Funded*.

Surface and Groundwater Monitoring on the Yerington Paiute Campbell Ranch Reservation (Consulting and Training). 2001-2002. Yerington Paiute Environmental Office. \$25,000. *Funded*.

Assessment of Water Quality on the Yerington Paiute Campbell Ranch Reservation. 2000. Yerington Paiute Environmental Office. \$15,000. *Funded*.

Assessment of the Impact of the Anaconda Mine Site on Air Quality. 2000. Yerington Paiute Environmental Office. \$20,000. *Funded*. 2002 \$51,000. *Funded*.

The Long-Term Effect of Flooding of Residential Housing. 2000. NSF PATH Program. Other collaborators include Michigan Technological University and USDA Forest Products Laboratory. \$150,000. *Not Funded*.

Investigation of Volatile Organic Compounds in Indoor Air in Flood Repaired Housing. 2000. NSF PATH Program. Other collaborators include Michigan Technological University and USDA Forest Products Laboratory. \$150,000. *Not Funded*.

Heavy Metal Removal, Disinfection and Stabilization of Biosolids Using Sulfur Dioxide to Enhance Reuse. 2000. Water Environment Research Foundation. \$238,208. *Not Funded*.

USEPA Section 319(h) Nonpoint Source Pollution Program in Conjunction with the Washoe Tribe of NV and CA. (for wetland restoration along Clear Creek near Carson City, NV) 1999. \$150,000 total, \$12,000 subcontract. *Funded*.

Development funding for the National Disaster Resource Center for Wood Structures. 1998. University of Nevada, Reno. \$29,000. *Funded*.

Intrinsic Biodegradation of MTBE. 1997. Nevada Division of Environmental Protection. \$149,000. *Not Funded*.

Assessment of the Mobility of PCP from Wood Treating Waste: Evaluating the use of TCLP to Measure Real Impact. 1996. National Science Foundation, Washington, D.C. \$491,000. *Not Funded*.

In situ Remediation of PCP Contaminated Subsurface Environments Utilizing Air Sparging to Enhance Bioremediation. 1995. USEPA Superfund Innovative Technology Evaluation Program. \$300,000. *Not Funded* (project included collaborators at Michigan Technological University and Bell Pole, Ltd.)

Operation of Land Treatment Unit for PCP and PAH Contaminated Soils. 1995. Bell Pole, Ltd. Lumby B.C. 1994. \$50,000. *Funded*.

Publications and Presentations

McGinnis, B. Dietrick. 2010. Linden Fields, a 50 MW Proposed Solar Farm Project. California Energy Commission Pre-filing Presentation.

McGinnis, B. Dietrick and E. Ringelberg. 2010. Restoring a Rare Native Fish, the Hitch *Lavinia exilicauda chi*: Biology, Ecology, and an Initial Adaptive Management Plan. The California Society for Ecological Restoration (SERCAL) 17th Annual Conference.

McGinnis, B. Dietrick, Max Montgomery. 2006, 2008. Soil Erosion Basics and SWPPP development in Indian Country. A short course provided to Robinson Rancheria (2006) and Big Valley Rancheria (2008).

McGinnis, B. Dietrick. 2007. Literature Review Update for the Anaconda Mine Site in Yerington, Nevada. Prepared for the Yerington Paiute Tribal Environmental Office presented to the Yerington Paiute Tribal Council and the Administrator of Region 9 USEPA.

Invited Speaker. Alternative Energy for Lake County Tribes. Hinthil Environmental Resources Consortium (HERC) Meeting, November 2006.

Panel Chairman and Invited Speaker. *Making Your Environmental Program Work: Working with Industry and Local Government*. First National Tribal Sovereignty Conference, Reno, NV. May 2003.

McGinnis, B. Dietrick. 2002. Bringing Tribal Interest to Remediation Decisions. 6th National Conference on Environmental Management. Invited Speaker and Panelist for the Abandoned Mine Lands Team – EPA's Tech Assistance and Tribal Collaboration Case Studies Session. June 2 – 10, 2002. Reno, NV.

McGinnis, B. Dietrick. 2002. Developing Strategies for Tribal Superfund Programs – What Tribes Should Know When Dealing with Hazardous Waste Sites. Invited Speaker for the National Tribal Environmental Council Superfund Working Group.

McGinnis, B. Dietrick; E. Joe Middlebrooks; V. Dean Adams. 2001. Degradation of Ethylene Glycol in Fenton Systems. *Chemosphere*. Volume 45, No. 1, pp 101-108.

McGinnis, B. Dietrick, D. Koracin, and V. Isakov. 2001. Air Quality at the Yerington Paiute Tribe Reservation and Colony. Prepared for the Yerington Paiute Tribal Environmental Office for the Yerington Paiute Tribal Council and Region 9 USEPA.

McGinnis, B. Dietrick; E. Joe Middlebrooks; V. Dean Adams. 2000. Degradation of Ethylene Glycol in Photo Fenton Systems. *Water Research*. Volume 34, No. 8, pp. 2346-2354.

McGinnis, B. Dietrick. 2000. Literature Review for the Anaconda Mine Site in Yerington, Nevada. Prepared for the Yerington Paiute Tribal Environmental Office presented to the Yerington Paiute Tribal Council and the Administrator of Region 9 USEPA.

McGinnis, B. Dietrick; J.G. Curtis, M. Silveri and R. Moore. 2000. An Evaluation of an Electrolytic Process for the Removal of Ammonia and Urea from Simulated Spa Water. *Research in Pool and Spa Water Chemistry*. Volume 4, pp. 44-53.

McGinnis, B. Dietrick; E. Joe Middlebrooks; V. Dean Adams. 1999. Evaluation of Methylene Blue and Riboflavin for the Photosensitized Degradation of Ethylene Glycol. *Environment International*. Volume 25, No. 8, pp. 953 – 959.

McGinnis, B. Dietrick; J.G. Curtis, M. Silveri and R. Moore. 1999. An Evaluation of an Electrolytic Process for the Removal of Ammonia and Urea from Simulated Spa Water. Presented at the National Spa and Pool Association's International Exposition and Conference, Las Vegas, NV.

Dupont, R.R.; D.L. Sorensen; M. Kemblowski; M. Bertleson; D. McGinnis; I. Kamil; Y. Ma. 1998. *Monitoring And Assessment Of In Situ Biocontainment Of Petroleum Contaminated Ground-Water Plumes*. U.S. EPA Office of Research and Development, Washington D.C. **EPA/600/R-98/020**.

McGinnis, B. Dietrick; E. Joe Middlebrooks; V. Dean Adams. 1997. Degradation of Ethylene Glycol in Photo Fenton Systems. ACS Division of Environmental Chemistry, Preprint of Papers. Vol 37, No. 2.

McGinnis, B. Dietrick; R. Ryan Dupont; Kevin Everhart; George St. Laurent. 1994. Evaluation and Management of Field Soil Bioventing Systems for the Remediation of PCP Contaminated Surface Soils. *Environmental Technology*. Aug. 1. Vol 15, No. 8. 729-739.

Everhart, K.E.; E.M. Schmidt; B.D. McGinnis; G. St. Laurent. 1994. Reliability, Accuracy and Cost Efficiency of Immunoassay Field Screening Methods for Pentachlorophenol as a Component of Superfund Screening Procedures. ACS (Industrial and Engineering Chemistry Division, Pollution Prevention and Waste Management Subdivision) Emerging Technologies for Hazardous Waste Management Symposium, Atlanta, Georgia.

L.M. Schmidt; D. McGinnis; J.J. Delfino; K.E. Everhart. 1994. Characterization of a Water Remediation System for PCP Removal and the Impact of Selected Amendments on Biodegradation Rates at a Former Wood Treatment Facility. ACS (Industrial and Engineering Chemistry Division, Pollution Prevention and Waste Management Subdivision) Emerging Technologies for Hazardous Waste Management Symposium, Atlanta, Georgia.

McGinnis, B. Dietrick; K.E. Everhart; G. St. Laurent. 1994. Insitu Venting for the Remediation of a Shallow Aquifer Contaminated with Wood Treating Waste. ACS Emerging Technologies for Hazardous Waste Management Symposium, Atlanta, Georgia.

McGinnis, B.; K. Everhart; G. McGinnis. 1993. Management of TCLP Requirements for the Bioremediation of Soils Contaminated with Wood Treating Waste. ACS Emerging Technologies for Hazardous Waste Management Symposium, Atlanta, Georgia.

McGinnis, B.; R. Dupont; K. Everhart. 1993. Evaluation and Management of Bioventing Systems for the Remediation of Soils Contaminated with Wood-Treating Waste. 26th Great Lakes Regional Meeting of the American Chemical Society. May 27.

McGinnis, B. Dietrick; R. Ryan Dupont; Kevin Everhart. 1992. Detoxification of Soil Contaminated with Pentachlorophenol Using Hydrogen Peroxide. ACS (Industrial and Engineering Chemistry Division, Pollution Prevention and Waste Management Subdivision) Emerging Technologies for Hazardous Waste Management Symposium, Atlanta, Georgia.

McGinnis, B. Dietrick; R. Ryan Dupont; Kevin Everhart. 1992. Determination of Respiration Rates in Soil Piles to Evaluate Aeration Efficiency and Biological Activity. Air & Waste Management Association Annual Meeting, Kansas City, Missouri. June 1992.

McGinnis, B. Dietrick; R. Ryan Dupont; Kevin Everhart; G. St. Laurent. 1992. Evaluation of the Effectiveness of Soil Venting to Enhance the Degradation of Pentachlorophenol in Soil. Presented at the ACS (Industrial and Engineering Chemistry Division, Pollution Prevention and Waste Management Subdivision) Emerging Technologies for Hazardous Waste Management Symposium, Atlanta, Georgia.

Shi, Yan; R. H. Lane; B. McGinnis. 1990. Characterization of Acidic Materials Obtained by Fat Acidity Methods of the AOAC and the International Organization for Standardization (ISO). *Proceedings of the Association of Official Analytical Chemist.* New Orleans, Louisiana.

McGinnis, B. Dietrick. 1990. Determination of Retention by X-ray Fluorescence Using Split Borings from Southern Yellow Pine Poles Treated with Pentachlorophenol. *Proceedings of the American Wood Treating Association. Research and Technology Symposium, p. 2.*

Manifest for Grant Application # GRANT13580426

Grant Application XML file (total 1):

1. GrantApplication.xml. (size 28046 bytes)

Forms Included in Zip File(total 6):

1. Form ProjectNarrativeAttachments_1_2-V1.2.pdf (size 16040 bytes)

2. Form SF424_3_0-V3.0.pdf (size 24315 bytes)

3. Form SF424A-V1.0.pdf (size 22773 bytes)

4. Form EPA4700_4_3_0-V3.0.pdf (size 22696 bytes)

5. Form OtherNarrativeAttachments_1_2-V1.2.pdf (size 16013 bytes)

6. Form EPA_KeyContacts_2_0-V2.0.pdf (size 37316 bytes)

Attachments Included in Zip File (total 6):

1. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1239-Quality Assurance Statement.pdf application/pdf (size 195652 bytes)

2. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1234-FMPST FY23 CAA Grant Cvr Ltr Mrch 21 2022.doc application/unknown (size 23552 bytes)

3. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1238-Air Quality Monitoring Infrastructure Program.pdf application/pdf (size 346382 bytes)

4. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1235-3. Masters Sr. Resume.pdf application/pdf (size 194918 bytes)

5. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1236-3. McGinnis Resume.pdf application/pdf (size 3522515 bytes)

6. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1237-LNC Letter of Support Tribe Air Quality Monitoring.pdf application/pdf (size 199517 bytes)